## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for monitoring a database, comprising:

~~collecting~~ submitting a first set of one or more database queries, to a database server that manages the database, to retrieve, from the database server, user behavior data that indicates ~~how~~ a first set of one or more actions performed, by one or more users, ~~use~~ as a result of the one or more users executing a first set of database statements against the database;

processing and storing ~~the~~ one or more sets of user behavior data as historical data, said one or more sets of user behavior data including said user behavior data that was retrieved from the database server in response to the first set of one or more database queries being executed against the database;

analyzing the historical data to determine behavior patterns;

~~receiving~~ submitting a second set of one or more database queries, to the database server, to retrieve, from the database server, a new set of data that indicates a second set of one or more actions performed, by ~~how~~ the one or more users, ~~have used the database~~ as a result of the one or more users executing a second set of database statements against the database;

performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns;

determining, based on the comparison, whether the new set of data satisfies a set of criteria;

if the new set of data satisfies the set of criteria, then determining that the new set of data represents anomalous activity; and

responding to the determination by performing a targeted operation.

2. (Original) The method of claim 1, further comprising:

determining if the new set of data violates a rule based policy; and if the new set of data violates the rule based policy, then determining that the new set of data represents anomalous activity.

3. (Currently Amended) The method of claim 2, wherein ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprises:
reading information from an audit trail or dynamic performance views of [[the]] a database manager.

4. (Currently Amended) The method of claim 3, wherein ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprises ~~collecting information~~ submitting the first set of one or more database queries to the database server at a monitoring level selected from at least one of:
information about database access for one or more selected database objects;
information about database access for one or more selected database users; and
information about database access for one or more selected database user sessions.

5. (Currently Amended) The method of claim 3, wherein ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprises:
receiving a type of information to be monitored;
determining a monitoring level from the type of information; and
activating audit options of the database manager based upon the monitoring level determined.

6. (Original) The method of claim 2, wherein analyzing the historical data to determine behavior patterns further comprises:
determining a statistical model from the historical data.

7. (Original) The method of claim 6, wherein determining a statistical model from the historical data further comprises:
determining a frequency of database access from the historical data;
determining a probability function for frequencies of database access; and
determining a cumulative probability function from the probability function.

8. (Currently Amended) The method of claim 7, wherein performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns further comprises:
testing a hypothesis using the new set of data against the statistical model.

9. (Original) The method of claim 8, wherein testing a hypothesis using the new set of data against the statistical model further comprises:
determining a frequency of database access for the new set of data; and
determining the threshold value from a guard criteria and a probability function parameter.

10. (Original) The method of claim 9, wherein testing a hypothesis using the new set of data against the statistical model pattern further comprises:
comparing the frequency of database access for the new set of data with the threshold value.

11. (Original) The method of claim 7, wherein the historical information is about database access for one or more selected database objects and wherein determining a frequency of database access from the historical data further comprises determining a frequency of at least one of:
object access frequency by hour of day, object access frequency by hour of day and operating system user, object access frequency by hour of day and database user, object access frequency by hour of day and location, object access frequency by hour of day and combination of at least two of operating system

user, database user and location.

12. (Original) The method of claim 7, wherein the historical information is about database access for one or more selected database users and wherein determining a frequency of database access from the historical data further comprises determining a frequency of at least one of:

user access frequency by hour of day, user access frequency by hour of day and operating system user, user access frequency by hour of day and database user, user access frequency by hour of day and location, user access frequency by hour of day and a combination of at least two of operating system user, database user, and location.

13. (Original) The method of claim 7, wherein the historical information is about database access for one or more selected database user sessions and wherein determining a frequency of database access from the historical data further comprises determining a frequency of at least one of:

number of page reads per session, access duration per session, number of page reads per unit time.

14. (Original) The method of claim 1, wherein performing a targeted operation comprises at least one of: raising an alert; sending an email; producing a report; performing a visualization.

15. (Currently amended) A computer-readable storage medium carrying one or more sequences of instructions for reverting to a recovery configuration in response to device faults, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:

~~collecting~~ submitting a first set of one or more database queries, to a database server that manages the database, to retrieve, from the database server, user behavior data that indicates ~~how~~ a first set of one or more actions performed, by one or more users, ~~use~~ as a result of the one or more users executing a first set of database statements against the database;

processing and storing ~~the~~ one or more sets of user behavior data as historical data, said one or more sets of user behavior data including said user behavior data that was retrieved from the database server in response to the first set of one or more database queries being executed against the database;

analyzing the historical data to determine behavior patterns;

~~receiving~~ submitting a second set of one or more database queries, to the database server, to retrieve, from the database server, a new set of data that indicates a second set of one or more actions performed, by ~~how~~ the one or more users, ~~have used the database~~ as a result of the one or more users executing a second set of database statements against the database;

performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns;

determining based on the comparison, whether the new set of data satisfies a set of criteria;

if the new set of data satisfies the set of criteria, then determining that the new set of data represents anomalous activity; and

responding to the determination by performing a targeted operation.

16. (Currently Amended) The computer-readable storage medium of claim 15, further comprising instructions which, when executed by the one or more processors, cause the one or more processors to carry out the steps of:

determining if the new set of data violates a rule based policy; and

if the new set of data violates the rule based policy, then determining that the new set of data represents anomalous activity.

17. (Currently Amended) The computer-readable storage medium of claim 16, wherein the instructions for carrying out the step of ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprise

instructions for carrying out the step of:
reading information from an audit trail of the database manager.

18. (Currently Amended) The computer-readable storage medium of claim 17, wherein the instructions for carrying out the step of ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprise instructions for carrying out the step of ~~collecting information~~ submitting the first set of one or more database queries to the database server at a monitoring level selected from at least one of:
information about database access for one or more selected database objects;
information about database access for one or more selected database users; and
information about database access for one or more selected database user sessions.

19. (Currently Amended) The computer-readable storage medium of claim 17, wherein the instructions for carrying out the step of ~~collecting user behavior data~~ submitting the first set of one or more database queries to the database server further comprise instructions for carrying out the steps of:
receiving a type of information to be monitored;
determining a monitoring level from the type of information; and
activating audit options of the database manager based upon the monitoring level determined.

20. (Currently Amended) The computer-readable storage medium of claim 16, wherein the instructions for carrying out the step of analyzing the historical data to determine behavior patterns further comprise instructions for carrying out the step of:
determining a statistical model from the historical data.

21. (Currently Amended) The computer-readable storage medium of claim 20, wherein the instructions for carrying out the step of determining a statistical model from the historical data further comprise instructions for carrying out the step of:

determining a frequency of database access from the historical data;
determining a probability function for frequencies of database access; and
determining a cumulative probability function from the probability function.

22. (Currently Amended) The computer-readable storage medium of claim 21, wherein the instructions for carrying out the step of performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns further comprise instructions for carrying out the step of:
testing a hypothesis using the new set of data against the statistical model.

23. (Currently Amended) The computer-readable storage medium of claim 22, wherein the instructions for carrying out the step of testing a hypothesis using the new set of data against the statistical model further comprise instructions for carrying out the steps of:
determining a frequency of database access for the new set of data; and
determining the threshold value from a guard criteria and a probability function parameter.

24. (Currently Amended) The computer-readable storage medium of claim 23, wherein the instructions for carrying out the step of testing a hypothesis using the new set of data against the statistical model further comprise instructions for carrying out the step of:
comparing the frequency of database access for the new set of data with the threshold value.

25. (Currently Amended) The computer-readable storage medium of claim 21, wherein the historical information is about database access for one or more selected database objects and wherein the instructions for carrying out the step of determining a frequency of database access from the historical data further comprise instructions for carrying out the step of determining a frequency of at least one of:

object access frequency by hour of day, object access frequency by hour of day and operating system user, object access frequency by hour of day and database user, object access frequency by hour of day and location and object access frequency by hour of day and a combination of at least two of operating system user, database user and location.

26. (Currently Amended) The computer readable storage medium of claim 21, wherein the historical information is about database access for one or more selected database users and wherein the instructions for carrying out the step of determining a frequency of database access from the historical data further comprise instructions for carrying out the step of determining a frequency of at least one of:

user access frequency by hour of day, user access frequency by hour of day and operating system user, user access frequency by hour of day and database user, user access frequency by hour of day and location and user access frequency by hour of day and a combination of at least two of operating system user, database user, and location.

27. (Currently Amended) The computer readable storage medium of claim 21, wherein the historical information is about database access for one or more selected database user sessions and wherein the instructions for carrying out the step of determining a frequency of database access from the historical data further comprise instructions for carrying out the step of determining a frequency of at least one of:

number of page reads per session, access duration per session, number of page reads per unit time.

28. (Currently Amended) The computer readable storage medium of claim 15, wherein the instructions for carrying out the step of performing a targeted operation comprises comprise instructions for carrying out at least one of: raising an alert; sending an email; producing a report; performing a visualization.

29. (Currently amended) An apparatus, comprising:

means for ~~collecting~~ submitting a first set of one or more database queries, to a database server that manages the database, to retrieve, from the database server, user behavior data that indicates ~~how~~ a first set of one or more actions performed, by one or more users, ~~use~~ as a result of the one or more users executing a first set of database statements against the database;

means for processing and storing ~~the~~ one or more sets of user behavior data as historical data, said one or more sets of user behavior data including said user behavior data that was retrieved from the database server in response to the first set of one or more database queries being executed against the database;

means for analyzing the historical data to determine behavior patterns;

means for ~~receiving~~ submitting a second set of one or more database queries, to the database server, to retrieve, from the database server, a new set of data that indicates a second set of one or more actions performed, by ~~how~~ the one or more users, ~~have used the database~~ as a result of the one or more users executing a second set of database statements against the database;

means for performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns;

means for determining based on the comparison, whether the new set of data satisfies a set of criteria;

means for determining that the new set of data represents anomalous activity, if the new set of data satisfies the set of criteria; and

means for responding to the determination by performing a targeted operation.

30. (Currently amended) An apparatus, comprising:

a data collector for (a) collecting user behavior data that indicates ~~how~~ a first set of one or more actions performed, by one or more users, as a result of the one or more users executing a first set of database statements against ~~use~~ the database, ~~and~~ (b) processing and storing the one or more sets of user behavior data as historical data, said one or more sets of user behavior data including said user behavior data that was retrieved from the database server in response to the first set of one or more database queries being executed against the database, [[;]] and (c) ~~receiving~~ submitting a second set of one or more database queries, to the database server, to retrieve, from the database server, a new set of data that indicates ~~how~~ a second set of one or more actions performed, by the one or more users, as a result of the one or more users executing a second set of database statements against ~~have used~~ the database;

a data analyzer for analyzing the historical data to determine behavior patterns; and

an anomaly detector for (a) performing a comparison between the new set of data and the determined behavior ~~pattern~~ patterns,[[;]] (b) determining, based on the comparison, whether the new set of data satisfies a set of criteria, [[;]] (c) determining that the new set of data represents anomalous activity if the new set of data satisfies the set of criteria, [[;]] and (d) responding to the determination by performing a targeted operation.